

AGENTS' BULLETIN

MISSOURI
PACIFIC
IRON
MOUNTAIN

June

1915

Vol. VIII

SAINT LOUIS

No. 6



Loggia of one of the Main Exhibit Buildings Overlooking the Prado or Main Street at the Panama-California Exposition, San Diego

CLIMATE and creative genius have devised at San Diego an Exposition of wonderful charm—Architecturally there is a beauty of exquisite harmony into which enter the fairest works of man and nature in complete, inspiring concord. The San Diego Exposition, artistically, financially and from the standpoint of attendance is a remarkable success. Reached by The Scenic Limited and direct connections at Salt Lake City or San Francisco.



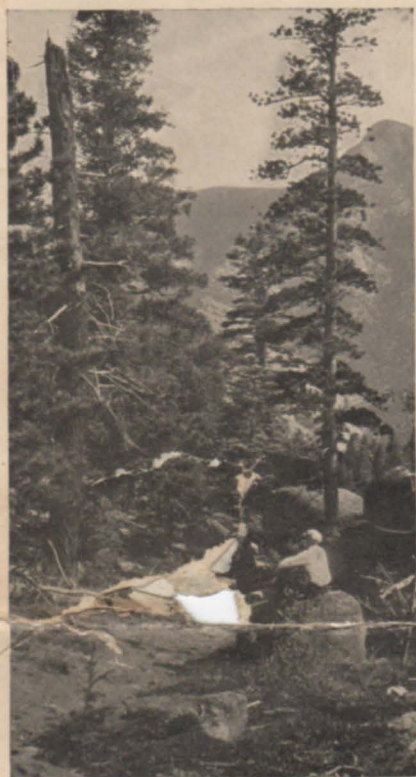
Denver, Colorado Springs and Vicinity



Looking Down Upon the Tops of High Mountains from the Cog Railway Near the Summit of Pike's Peak



Cheeseman Memorial in Cheeseman Park, Denver — Colorado's Capital City is Noted for its Many Beautiful Parks



Adjacent to Colorado Springs are Innumerable Trails Leading to Places of Great Beauty



The Scenic Limited Follows for More Than 75 Miles Along the Missouri River, Skirting the Foot Hills of the Ozarks

Through Sleeping Car between St. Louis, Kansas City, Colorado Springs and Denver on The Scenic Limited

A TWELVE section, electric-lighted, steel, drawing room sleeping car is now operated daily on The Scenic Limited, Trains Nos. 19 and 20, between St. Louis, Kansas City, Colorado Springs and Denver.

With the addition of this through sleeping car to Denver, The Scenic Limited now provides the fastest through service between St. Louis and Colorado Springs, thus affording a most excellent and convenient service for Colorado travel, either for those destined to Colorado or for Pacific Coast Passengers who desire to make the free side trip between Pueblo, Colorado Springs and Denver.

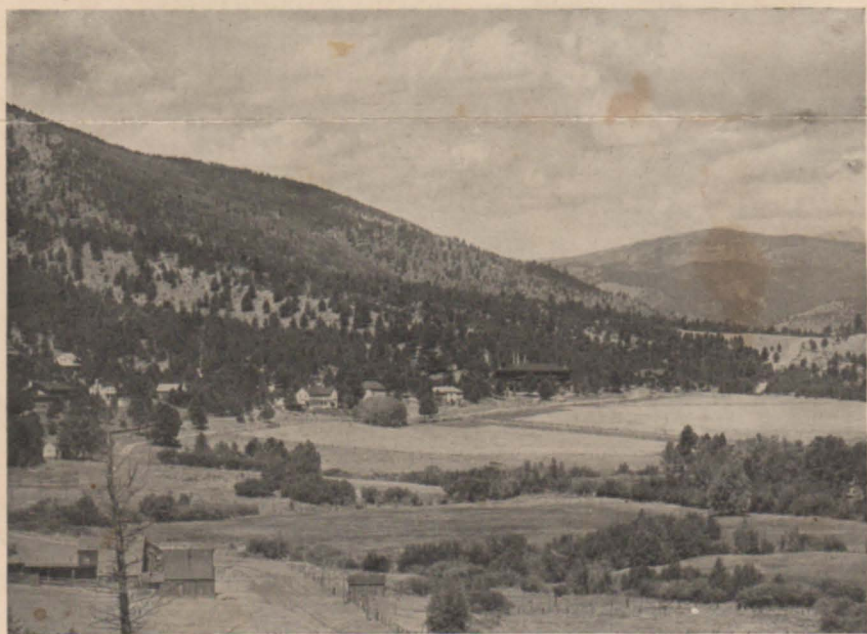
The Scenic Limited is the Only Through Train between St. Louis, Kansas City and the Pacific Coast



On the Trip to Cripple Creek Passengers Experience all the Thrills of Aeronautics



On The Scenic Limited the Eye is Greeted with Cultivated Fields practically all the Way from St. Louis right up to the Rocky Mountains



Shawnee Lodge in Platte Canon, one of a Number of Delightful Spots Near Denver for Summer Recreationists



On the Crystal Park Auto Tour, Approaching the Turn-Table — Manitou in the Distance Below



At the Mouth of Small Streams
Emptying into the Current
There is Plenty of Bass



The Current River is One of the Most Beautiful of the Ozark
Streams and Affords Fine Fishing and Floating

Unusual Recreation Advantages of Missouri

By CECIL MORRISON BASKETT

MISSOURI'S offerings to seekers of recreation are charming and varied. Here, in the central-western part of our country of scenic wonders, is a natural playground incomparable.

The Ozark range of mountains, probably Nature's first land grant to the Universe, reaches its climax of beauty and presents its grandest settings in Missouri. Magnificent scenery of gorgeous beauty and enthralling effect; clear, swift, spring-nourished mountain streams of crystal water; virgin hills of verdant splendor with broad fertile valleys of agricultural delight—all these blend to present a wondrous spectacle and an urgent invitation to those who have vacations to spend, whether for pleasure, alone, or to repair tired physical functions and fagged brains.

Camping, fishing, hunting, sight-seeing, mountain climbing, botanizing, geologizing, or the simple rest afforded at the many established resorts, are all here prominent in effective and intimate phases.

Accessible, convenient and illimitable is this wonderful country. Extending a beckoning arm right into the boundaries of a great metropolis, the Ozarks have their gateway in the suburbs of St. Louis, and into and about this vast pleasure-trove, the lines and ramifications of the Missouri Pacific-Iron Mountain System wind in familiar contiguity.

European conditions of strife that have compelled Americans to forego foreign travel, have caused to be cultivated a desire among those who have heretofore neglected the superb advantages of their own country and its grandeurs, to look closer about them for the enjoyment of their usual season's diversions. Nowhere are the environments more inviting than in the Great Outdoors section of Missouri. The only range of dignity between the Alleghenies and the Rockies and from the Lakes to the Gulf, the Ozark Mountains, because of their proximity and the ease with which access to their innermost recesses is obtained, should appeal to all who wish for just what such a country bountifully affords.

The finest bass fishing, probably, in the world obtains in the rivers of these Missouri hills. Nowhere else, in a like area, are there so many mountain streams. The small-mouth bass, the rainbow trout and the pike-perch, gamiest of the clear-water game fish, greedily takes fly and bait along their tortuous courses. Some large and much

small game inhabit these regions. Natural camping sites and gravelly bathing beaches are innumerable, and outing resorts of more than local reputation are located along both the Missouri Pacific on the north and west, and the Iron Mountain Railway, east and south. For scenery, none in America excels that of the Ha-Ha-Tonka region, the Arcadia valley and the White River country. The Niangua river and the Black, Current, Gasconade and Meramec are among the prettiest streams of the North American continent, and all within from a few minutes' ride to a half-day's journey from Union Station in St.

him fit for the work demanded of him, is right at us. Restful landscapes, invigorating breezes and various modes of recreation are all about. Here, indeed, is the tired man's haven. Energy and appetite, care-free abandon and renewed strength come voluntarily to one in these mountains, where the wine of enthusiasm and the visions of splendor impel and exhilarate.

After careful analyzation of the situation and conditions herein set forth, the paramount fact remains that the lines of the Missouri Pacific-Iron Mountain System reach all the principal fishing streams and the best hunting,



The Beautiful Meramec at Famous Glencoe Curve

Louis. Most of them are crossed and re-crossed, and some are paralleled, by the Missouri Pacific-Iron Mountain tracks. This fact is especially advantageous to those who make float pilgrimages down these inviting streams. The floats on the James and White rivers are nationally famous, and trips down the Black, Current, Niangua, Gasconade and Osage are taken by thousands through a long season.

These, too, are healthful hills. There are no greater offerings to the physically hungered and mentally fatigued than are here presented. That great asset to man, who must have natural diversions and a change of vision to keep

camping and resort territory of Central and Southern Missouri. It is in these parts of the State, only, that the cold, clear-water Ozark Mountain rivers flow, and here the outer and camper, hunter and fisherman revel in the atmosphere and environments of natural conditions. Patrons of this great system are fortunate in being able to enjoy much of the best inland-water fishing in all America, and to visit numerous popular resorts at an expenditure of time and money that is astonishingly small.

Outers have a choice variety of districts to select from for experiencing their various forms of recreation. On the Missouri Pacific such splendid



Ideal Camp Sites are to be Found
all Along the James and
White Rivers

streams as the Meramec, Big, Missouri, Gasconade, Osage and Niangua rivers, in the order named, with their important tributaries, are reached directly from St. Louis, and with but little effort. Here scenery, camping, hunting and fishing are unexcelled.

Along the Iron Mountain in Missouri, recognized points of popularity are reached on the Mississippi, lower Meramec, lower Big, upper St. Francis, Black and Current rivers, in mentioned sequence, that defy comparison, and which afford superb advantages to outers.

In the extreme southeastern corner of Missouri, branches of the St. Louis, Iron Mountain and Southern Railway penetrate territories threaded by the famous waters of the St. Francis, Castor, Little and their contributing rivers, and the Sunken Lands.

In Southwestern Missouri the White and James rivers and the lesser Spring river attract thousands each year from all over the United States. This section is easily reached from Kansas City and other points via Joplin and Carthage on the White River branch of the Missouri Pacific-Iron Mountain System, as well as from St. Louis. Fishing is good nearly all the year 'round in Missouri Ozark streams.

The future of this section of Missouri can but be imagined now, so vast are its possibilities. It is just coming into its own. More and more each season come visitors from a distance. People are fast realizing the great store of enjoyment that here awaits them. One visit to these Ozarkian environments and they are permanently inoculated with the Ozark fervor, and it is ever back—back to this wonderland—that they come. Each trip is a new experience; every outing a revelation. They arrive from the East, the North and the West, leaving their own natural attractions to enjoy Ozark superiority in preference. To penetrate the very midst of all this is worth traveling hundreds of miles, and those hundreds are negotiated. Let your next outing, whether alone or with the family, be in the Missouri Ozarks. Missouri's southern topography is such that it is rare, indeed, when some district is not in good condition for the outer, regardless of the fickleness of the elements. Spring, Summer and Fall have their respective charms. Take your choice, and wait no longer to get out into Nature's most marvelous playground.



The Big River in the Vicinity of De Soto
is a Popular Fishing, Canoeing and
Boating Stream



Swimming and Canoeing in the Meramec
at Grand Leader Recreation Grounds,
Near St. Louis



The St. Francis River is One of the Best
Fishing Streams of Southeast
Missouri



Lake Cena at Pertle Springs



Black River From Hunt's Farm



Moreau River Near Jefferson City

Recreation Grounds in Missouri Pacific-Iron Mountain Territory

WITH every vacation season there comes a constantly increasing demand for information regarding vacation resorts and good places for week-end outings—places that can be reached quickly and conveniently. That our agents may be in position to answer intelligently these many enquiries we are giving below a brief description of a number of Vacation Playgrounds in Missouri Pacific-Iron Mountain territory. There are many sections traversed by these lines that offer abundant opportunity for most delightful vacation trips. Some of these are veritable beauty spots of Nature, which, if they were labeled "Switzerland" or some other far-away land would attract visitors by the thousands.

White and James River Country

In Southwest Missouri are two of the most beautiful rivers to be found anywhere on the American Continent—the White and the James Rivers and along these two beautiful streams there has been built up a string of delightful outing camps and permanent recreation grounds where vacation pleasure may be found to suit every taste or fancy. A vacation trip to this region requires but little time and entails no large expense.

Recreation Camps

The White River Section in the vicinity of Galena, Branson and Hollister is perhaps the best developed part of the Missouri Ozarks, and as a result the popularity of this section is growing rapidly. Galena is the center of a number of splendidly arranged camps and is the starting point for the famous James-White River Float Trip.

Camp Clark is located just one mile from the Missouri Pacific station at Galena, on the James River. This is a clean, healthful outing camp where jolly, cheerful people may have a genuine good time. Fishing, boating and bathing are fine. Furnished tents and bungalows are available to visitors.

Camp Look-Out is two and one-half miles from Galena with the James River on three sides of the grounds. Nicely

arranged bungalows and tents may be had by camping parties. A large Mess Hall, everything furnished, is designed to give the ladies of the party a vacation the same as the men.

In the vicinity of Branson and Hollister, the Presbyterians of the Southwest and the Interstate Y. M. C. A. have recreation grounds that are ideally laid out and most conveniently arranged. Both of these camps are open to visitors during the season. A large number of people take advantage of the Presbyterian Assembly held each year during the month of August. The assembly grounds comprise 165 acres overlooking the beautiful White River.

Camp Ozark, under the direction of the Y. M. C. A., is a charming spot. This camp, while intended, primarily for association men, is open to other guests who are in accord with the objects of the camp, except when special conferences and camps require the accommodations. Facilities are provided for tennis, croquet and baseball. Fishing, boating and bathing are to be enjoyed in the White River. Lake Taneycomo nearby provides excellent motor-boating and other water sports.

Fishing and Floating on Lake Taneycomo

The building of the dam at Powersite has created a fishermen's paradise unequalled in the central states. The gates of the dam were closed in March in a time of high water when the fish were up stream and myriads of them were shut into the lake, which, with its deep, still water, forms a veritable hatchery. It is therefore teeming with bass, crappie, perch, cat and other fish. Below the dam the fish congest in unlimited numbers in the journey up stream searching for shallow waters for spawning and here no fisherman fails of a good catch. Bass weighing as much as six and one-half pounds have been caught at Powersite.

Down the river below Powersite is one of the most scenic float trips in the Ozarks with good fishing all the way to Cotter, Arkansas, a ten days' float, curving and winding along an ever changing panorama of beautiful hills. Hundreds have enjoyed

the shorter float trip to Moore's Ferry, a distance of twenty-five miles as the river bends, but only five miles return by land. For the convenience of guests making this float, R. W. Wilson of Powersite, has established a club house at the mouth of Beaver Creek. Here the floating party bring their day's catch and in one of the beauty spots that abound in this section, besides a roaring spring build a cheery camp fire and enjoy a "fry."

Beside the fishing and floating there is boating and bathing and rowing in the clearest and purest of water. A sandy bathing beach along the water's edge below the hotel is one of the most popular spots on the lake on hot summer days. A motor boat free of charge is at the disposal of hotel guests. Many enjoy hill climbing with magnificent views at every turn or resting in the cool forest shades in the little parks where the natural beauty has only been enhanced not spoiled. Then there are delightful inland trips through the Bald Knobber and Shepherd of the Hills Country, and through the fall and winter months hunting and duck shooting. If one does not wish wholly to get away from the pleasures of our modern life there are tennis courts, croquet grounds and other pleasures afforded the guests of Cliff House.

In Southeast Missouri

Current River, rising in the central Ozark Mountains and coursing southward through the wildest part of Missouri, is one of the prettiest streams to be found anywhere. Here you can hunt or fish, work or play, and all the while breathe the pure mountain air of the Ozarks, all for a nominal cost and with the expenditure of as much or little time as one may wish.

For the fisherman, there is no greater paradise than along this beautiful Ozark mountain stream. Bass fishing, for which the stream is particularly noted, commences early in spring and lasts until late in fall. The best months are probably July, August and September.

Bass are found in all of the streams which have their source in the mountains. Black River, in Eastern Missouri, is pro-

nounced by sportsmen to be the best bass stream in the world. Castor, St. Francis and the Big and Little Rivers are much of the same character as the Black.

Illinois Side

There are a number of good fishing points on the Illinois side, along the Iron Mountain, such as Fish Lake and stream connecting with Pittsburgh Lake on the northeast, reached from Valley Junction; Murdock Lake, reached from Valmeyer; Wallace and Reader's Lake, reached from Maecy; Reily Lake, 62 miles south of East St. Louis, and Wolf Lake, 108 miles south of East St. Louis. Boats and fishing tackle may be had at these points. Good accommodations at farm houses near by or in the local hotels.

Outing Farms and Resorts

There are a number of well-improved outing farms and resorts and a great many beautiful sections along the Missouri Pacific and Iron Mountain where excellent recreation facilities are to be had, with good board at very reasonable prices.

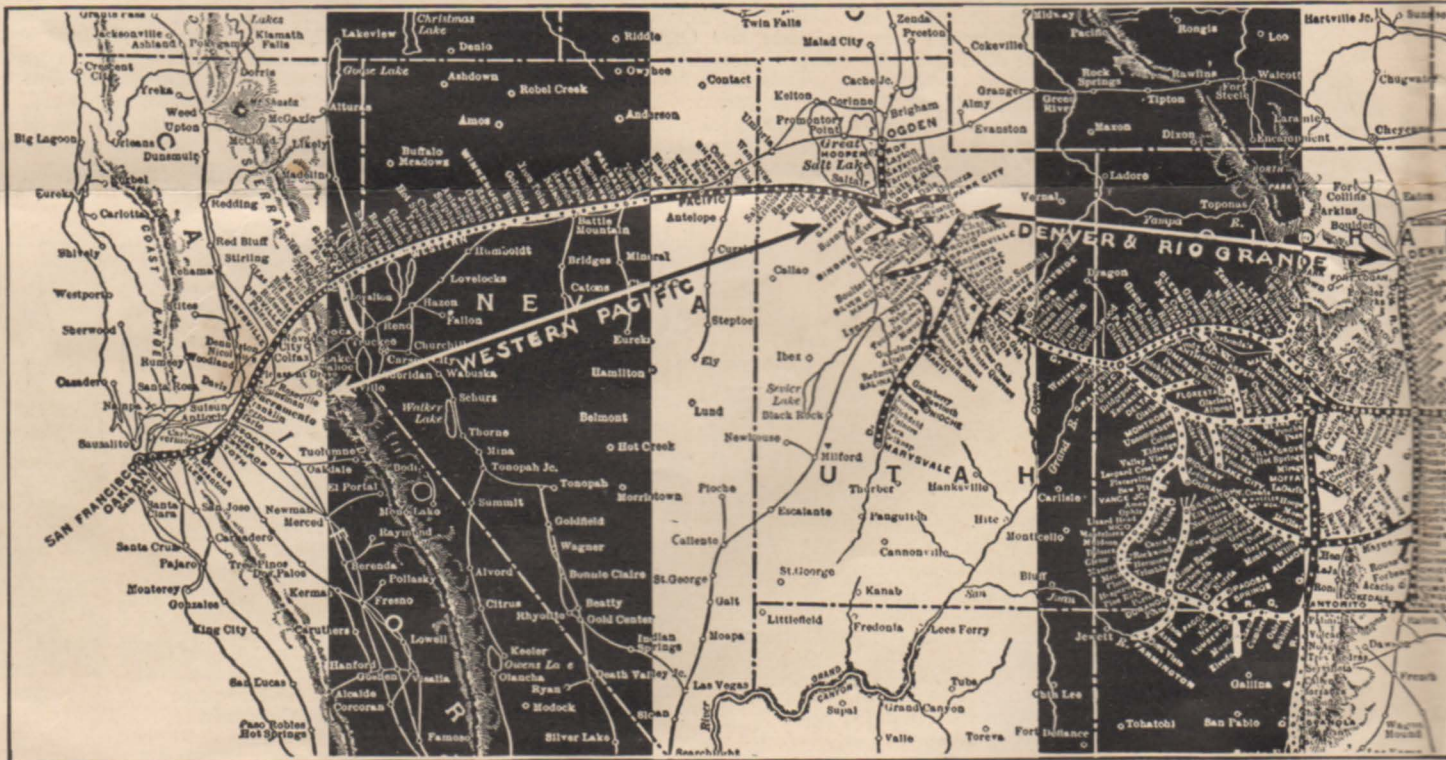
Hunt's Farm, nine miles west from Glover, on the Iron Mountain, is a delightful, homey place overlooking Black River, and a great many people spend their vacations here each year. McKibben's Farm, or the Ozark Outing Camp, nine miles west of Annapolis, on the Iron Mountain, is another well improved place on Black River with facilities for caring for a large number of people.

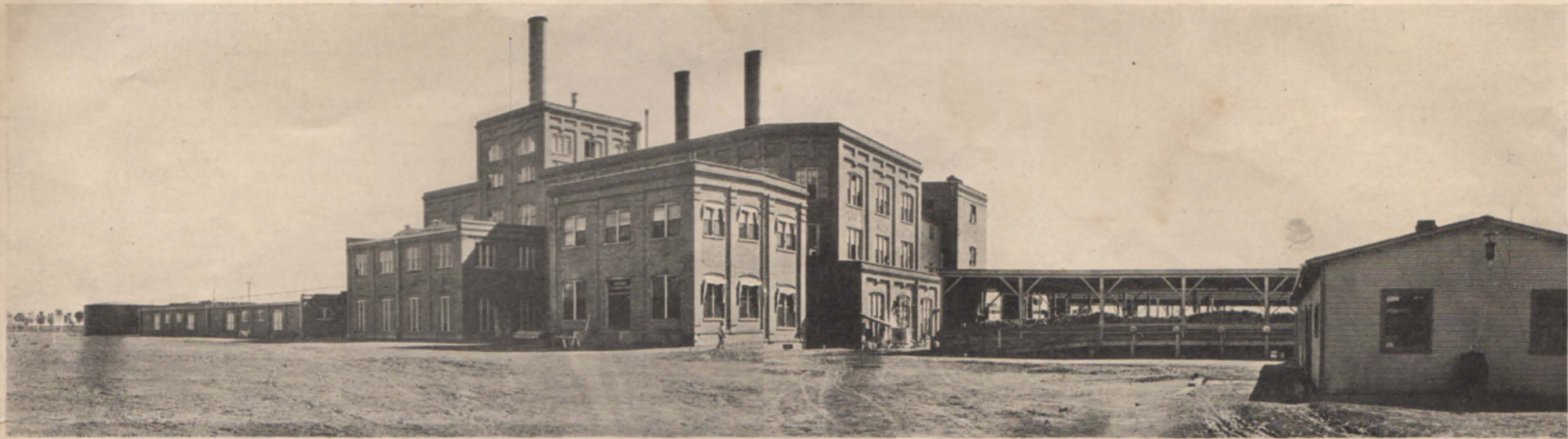
Arcadia Valley

In the Arcadia Valley 90 miles south from St. Louis, there are many delightful spots. Good hotel and boarding house accommodations are to be had at very reasonable prices. On Arcadia Heights in this section the Baptists of Missouri have established one of the finest assembly grounds in the state. There are a number of permanent bungalows, a general store, assembly tabernacle, water works, swimming pool, tennis and brevet courts, and splendid driveways. The view from the Heights is magnificent. The assembly is

(Continued to page 7)

THE purpose of this map is to show how carefully the schedule of The Scenic Limited has been worked out to include practically all sections of greatest scenic interest in daylight rides. First afternoon, along the Meramec and Missouri Rivers and through the rich agricultural section of Central Missouri. Second day, across the rich farming sections of Western Kansas and Eastern Colorado and into the heart of the Rockies, through the famous Royal Gorge. Third day, through wonderful Utah Valley, Salt Lake City and across Great Salt Lake and the Utah Salt Beds. Fourth day, through Feather River Canon, down the famous Sacramento Valley, known as one of the most fertile spots in the world, and across beautiful San Francisco Bay into the Exposition City.





Beet Sugar Factory at Sugar City, Colorado — One of the Leading Industries of Eastern Colorado

A Treatise on Sugar Beet Culture and How Beet-Sugar is Made

THE fields to be planted to sugar beets are first thoroughly fertilized with either barnyard manure or commercial fertilizer. The land is plowed about ten inches deep in the fall if possible. Sugar beets require deeper plowing than most crops. In the spring as early as the weather permits the ground is harrowed, and the beet seed is then drilled in rows eighteen inches apart, twenty pounds of seed being drilled to each acre. The beet seed is obtained by the factory from Germany and Austria, and sold to the farmers at cost, usually ten cents per pound, and the farmers are allowed until fall to pay for the seed. When the beets are up and show the third or fourth leaf they are "thinned," that is, the beets are blocked out with hoes and a bunch of beets left every eight inches, the superfluous beetlets are then pulled out, leaving one beet in a place eight inches apart. The leaves of the beets gather the sugar from the atmosphere by the aid of the light and deposit the sugar in the root, none of it coming from the soil; hence the fields are kept clear of weeds and foul growth, which would shade the beets and reduce their sugar content. This is done by means of a cultivator which stirs the earth to a depth of from four to six inches. Most fields are cultivated several times during the season and hoed by hand at least twice. The beets usually begin to ripen about the first of September, and samples are taken every week by the factory to determine when the beets are ready to be pulled. When the beets are ripe as determined by the tests, i. e., when the percentage of sugar is high enough, the beets are plowed up.

Two factors are considered before the factory instructs the farmer to plow up his beets, first, the per cent of sugar in the beet; second, the purity of the beet. By the purity is meant the amount of sugar in the beet as compared with the total amount of salts present. Contained in the beet are substances in solution other than sugar as proteins, nitrogenous matters, etc. It is the presence of these substances that makes sugar extraction expensive. They

also decrease the amount of sugar that can be extracted, as these impurities must not pass into the sugar. Beet must have at least an 80 per cent purity to be fit for sugar making. After the beets are plowed out they are topped, or the tops of the beets are cut off with a beet knife just below the crown of the beet, so as to remove any portion which grew above the ground as such portion of the beet contains but a very small percentage of sugar. This is the first and only time the beets or their product are touched by human hands until after the sack of sugar has been opened at the place of consumption. The topped beets are thrown to one side by the toppers and are then loaded into wagons and hauled to the beet dumps by the farmers residing in the vicinity of the Ordway, Numa, and King Center districts where the factory maintains beet dumps for unloading the beets into cars, while the farmers surrounding Sugar City haul beets to the factory sheds where they are unloaded. The beet dumps are inclined driveways from the top of which each wagon load of beets is dumped into open gondola cars below. These cars are then shipped to the factory at Sugar City, where they also are unloaded into the factory sheds. The capacity of the sheds at Sugar City is, of course, not large enough to take care of all the beets and some of the beets must be siloed, i. e., they are piled in rows and covered with earth until the factory is able to handle them. The farmers receive extra compensation from the factory for siloing beets. Samples are taken by the factory from each wagon load of beets delivered by the farmers, and conveyed to the beet laboratory where it is tested by the polariscope for its sugar content and purity. The farmers receive fifty cents per ton additional for all beets testing over sixteen per cent in sugar.

The beets are stored at the factory in four long sheds, from which they are flumed into the factory as needed. These sheds hold about a ten days' factory run, or enough to last over a spell of bad weather. At the bottom of each shed is a concrete

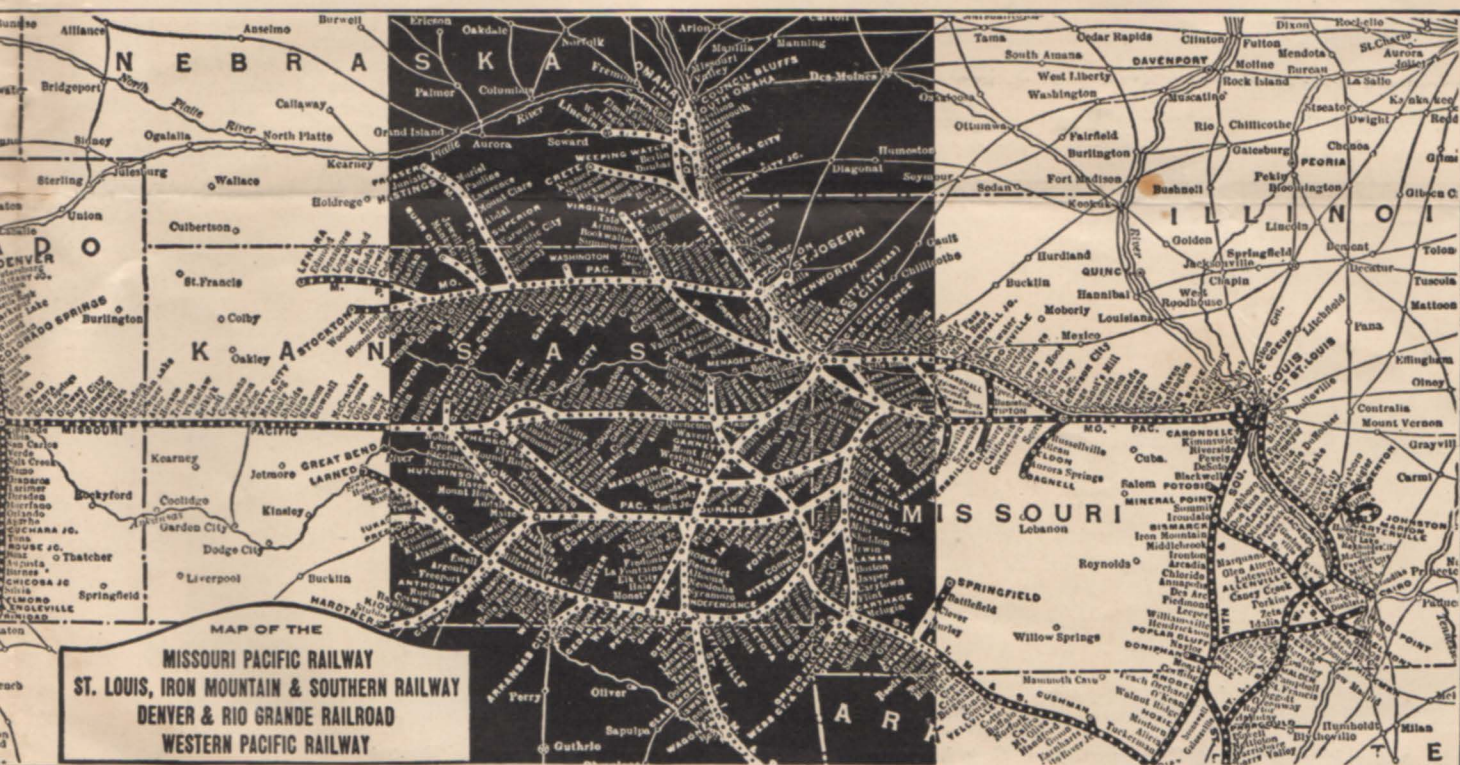
flume through which warm water is continually flowing, and as the beets are needed the planks covering these flumes are removed one at a time, and the beets rolled into the flume, or cement channel below, in which they are floated to the factory. The warm water in the flumes partly washes the beets before they reach the factory. After being floated in from the sheds the beets are elevated from the flume by a revolving wheel to a washer, where they are given a thorough washing before being sliced. From this washer the beets are carried by the beet elevator to the third floor of the factory where they are dropped into an automatic scale with a capacity of about four hundred pounds. This scale automatically registers the weight of the beets for the entire campaign.

From the scale the beets pass to the slicers where with triangular knives they are cut into long slender slices which look something like "shoestring" potatoes. These slices drop through a chute into the diffusion battery, which consists of a series of cylindrical vessels holding about two tons each, arranged in a straight line, into which the slices are tightly packed. Warm water is run into these slices and coaxes out the sugar as it passes from one vessel to the succeeding ones. After passing through the entire series of vessels, the water has become rich in sugar, of which it contains from twelve to fifteen per cent, depending upon the richness of the beets. The juice is then drawn off and is called diffusion or raw juice. This is carefully measured in a measuring tank and recorded. As this juice is drawn off, the vessel over which the water started is emptied of the slices from the bottom, the exhaust slices containing less than one-half of one per cent sugar. These slices are called beet pulp, and are pumped out of the factory into bins, called siloes, from which they are fed to stock as wet pulp. The warm raw juice drawn from the diffusion battery is then pumped into the carbonation tanks and treated with about ten per cent milk of lime—about like ordi-

nary white-wash. This lime throws out impurities, sterilizes the juice, and removes coloring matter. Carbonic acid gas from the factory lime kiln is forced through the lime juice in the tank, throwing out the excess of lime, converting it into a carbonate of lime. Tests taken by the operators show when each process is finished. From the carbonation tanks the juice is forced through filter presses consisting of iron frames so covered with cloth that the juice passes through the cloth as a clear liquid, leaving the lime and impurities precipitated by it in the frame in the form of a cake. This cake, after washing, is dropped from the presses and conveyed out of the factory. It contains from one to two per cent of its weight in sugar, which constitutes one of the largest losses of the process. This cake also contains organic matter, phosphate and potash, besides the carbonate of lime. The filtered juice is then again treated with carbonic acid gas in the second carbonation tanks, and after being again filtered, it passes to the evaporators, large air-tight vessels in which the juice is boiled out at a low temperature in a partial vacuum. The juice passes along copper pipes from the first to the last vessel, becoming thicker as it does so. It comes into the first vessel at 10 per cent to 12 per cent sugar and is pumped out of the last one so much thicker that it now contains about half sugar.

After a careful filtration the juice that comes from the evaporators, and is called thick juice, is pumped to large tanks and from these tanks is drawn into the vacuum pans. These are large cylindrical vessels with conical top and bottom, built air-tight. Around the inner surface these vessels are furnished with large copper coils which have a heating surface of about one thousand square feet, through which live steam passes, which boils the juice. This boiling is done in a vacuum to prevent discoloration and reduce losses. After considerable thickening by this evaporation minute crystals begin to form. When sufficient of these crystals have formed, fresh

(Continued to page 7)



FROM the black portions of the map, indicating sections traversed by night, it will be observed that passengers are on the train only one night between St. Louis and Colorado, two nights between St. Louis and Salt Lake City, and three nights between St. Louis and San Francisco. The level lay of the country in Western Missouri and Eastern Kansas makes it possible, of course, to cover a greater distance in a night than is shown after reaching the mountains, particularly for the second night in crossing over the Great Continental Divide. The Scenic Limited is the only through train between St. Louis and the Pacific Coast and the quickest through train between St. Louis and Colorado Springs. Scenery and service are inseparable features of a trip on The Scenic Limited.



Agents' Bulletin

ISSUED BY THE

PASSENGER TRAFFIC DEPARTMENT

MISSOURI PACIFIC-IRON MOUNTAIN

C. L. STONE, Passenger Traffic Manager

J. G. HOLLENBECK, General Passenger Agent

SAINT LOUIS

THIS PUBLICATION is a medium for the dissemination of facts pertaining to the Missouri Pacific-Iron Mountain lines, and is sent free to the company's sales force—its agents, both freight and passenger, and other employees representing the company with the public—for the purpose of keeping them fully advised as to the merits of the goods we have to sell, viz.: transportation to and through the principal cities of the West and Southwest.

VOL. VIII

JUNE, 1915

No. 6

The Scenic Limited an Unparalleled Success

THE success of The Scenic Limited, our new all-steel train between St. Louis, Kansas City and San Francisco, is a source of great satisfaction to the management and to our great family of employees as well. A loyal "boosting" spirit on the part of our employees has been an important and thoroughly appreciated factor in securing for this fine train the great success it now enjoys. On almost every day it is necessary to add extra equipment to take care of the business.

The Oldest Spot on the Continent

IF IT were possible to get a position at sufficient height directly above the central portion of the United States with the proper means of viewing through a great lens the whole surface of this country from ocean to ocean and from Canada to the Gulf, one would observe two great walls of mountains, the Alleghenies on the East holding back the Atlantic and the Rockies and the Pacific Coast Ranges on the West acting as a barrier to the waters of the Pacific. Right in the center of the great basin between these two mighty mountain walls the eye would discover a mammoth uplift in the earth's surface, rugged in appearance and oblong in shape, lying from Northeast to Southwest. This great uplift is the Ozark Mountains, the principal mountain elevation of the great Mississippi Valley and probably the oldest mountains on the Western Hemisphere. The little group known as the St. Francois Mountains, about 40 miles square, centering at Pilot Knob, in Southeast Missouri, is known to geologists as the nucleus of the American Continent. This region, together with one of similar formation just south of Hudson Bay, and the Guadalupe Mountains in Western Texas was the first land to emerge from the primeval ocean. About these three spots gradually grew the continent of North America.

While the Ozarks are not as high as the Rockies, they are, in some respects, even more beautiful. They are covered with vegetation and coursing down their sides, dividing at the backbone, are some of the most magnificent streams in the world. Novelists, artists, writers for magazines and other professional folk are finding in these hills and valleys a wonderful field of material and inspiration for their work, and each year sees their numbers increasing. Only last summer a group of Chicago artists visited the Ozarks in the White River Section and their paintings are now winning great praise.

The Ozark Mountains form a section that promises soon to become one of the most popular of America's vacation playgrounds. A wonderful development is now in progress. Magnificent hotels will follow. Good accommodations are already available. Our agents will find valuable information for their vacation patrons in the articles in this issue devoted to "Unusual Recreation Advantages in Missouri," by such an authority as Cecil Morrison Baskett, and "Vacation Playgrounds in Missouri Pacific-Iron Mountain Territory."

Four New Features in Missouri Pacific Service

Compartment Sleeping Car on The Scenic Limited between St. Louis, Kansas City and San Francisco, to be installed on or about July 1st.

Drawing Room Sleeping Car on The Scenic Limited between St. Louis, Kansas City, Colorado Springs and Denver, now in daily service—quickest through service between St. Louis and Colorado Springs.

Midnight Flyers between St. Louis and Kansas City now in daily service. Modern drawing room sleeping cars, free reclining chair cars and day coaches.

Observation Sleeping Car on Missouri Pacific Fast Mail No. 7, leaving St. Louis 2:20 a. m. daily (open for occupancy at 9:30 p. m.).

E. A. Hadley Appointed Chief Engineer

EFFECTIVE June 1st, E. A. Hadley, Chief Engineer of the Missouri Pacific-Iron Mountain, appointed H. R. Carpenter as Assistant Chief Engineer, with headquarters at St. Louis, vice C. E. Smith, resigned, and A. F. Dorley as Engineer of Maintenance of Way of the Eastern District, with headquarters at St. Louis.

Mr. Carpenter graduated from the Engineering Department of Yale in 1883, and began his railroad career as a roadman on the Union Pacific the following year. Later he went with the Denver & Rio Grande, and then for four years was Chief Engineer of the Colorado Springs and Cripple Creek District Railway. In February, 1905, he entered the service of the Missouri Pacific-Iron Mountain as an Assistant Engineer, and in August, 1912, was made Engineer of Maintenance of Way.

Mr. Dorley graduated from Notre Dame University in June, 1900, and immediately entered the service of the Baltimore and Ohio Southwestern. He served with that company and the Big Four until April 1, 1906, when he was made an Assistant Engineer of the Missouri Pacific-Iron Mountain. He has been Division Engineer at various points on the Missouri Pacific proper, and was brought to St. Louis on December 10, 1910, as Engineer of Water Service. On April 1, 1914, he was promoted to be Principal Assistant Engineer.

Operating Department Changes

UNDER authority of a circular issued May 28, by General Superintendent A. DeBernardi, approved by General Manager J. W. Higgins, and effective June 1st:

The jurisdiction of Mr. J. E. Snedeker, superintendent of the Central Kansas Division, is extended over the Colorado Division, with office at Osawatimie, Kansas.

Mr. A. J. Alexander is appointed Assistant Superintendent of the Horace District of the Colorado Division, with office at Pueblo, Colorado.

The jurisdiction of T. W. Collins, Trainmaster, Council Grove District, is extended over the Hoisington District, with office at Hoisington, Kansas.

Important Changes in Time and Train Service

EFFECTIVE Sunday, June 20, The Scenic Limited (Train No. 20), arrives in St. Louis, at 4:05 p. m., instead of 4:15 p. m.

Train No. 3 on the Missouri Pacific leaves St. Louis at 9:05 p. m. as heretofore, but arrives in Kansas City at 7:10 a. m. instead of 7:35 a. m. Train No. 4 leaves Kansas City at 9:05 p. m. instead of 9:00 p. m. and arrives in St. Louis at 7:10 a. m. instead of 7:30 a. m.

The Midnight Flyer now leaves each of the terminals, St. Louis and Kansas City at 11:45 p. m. instead of 11:30 p. m. and arrives at each point at 7:45 a. m. as heretofore.

An Observation Sleeping Car is now in daily service between St. Louis and Kansas City, west-bound on Train No. 7 (Fast Mail), leaving St. Louis at 2:20 a. m., and east-bound on Train No. 2. This car is open for occupancy in St. Louis Union Station at 9:30 p. m.

Train No. 21 is discontinued between Sedalia and Kansas City and stops heretofore made between these points will be made by Train No. 1.

Other changes, with above, are shown in special circular issued by the Passenger Department, June 17, and in current official folder now being distributed.

W. S. Martin, President Union Railway of Memphis

W. S. MARTIN, until recently vice-president and general manager of the Denver & Rio Grande, has been elected president of the Union Railway of Memphis, succeeding J. L. Lancaster, who resigned to become Assistant to First Vice-President Pearson of the Texas & Pacific Railway at New Orleans.

Mr. Martin, prior to his connection with the Denver & Rio Grande was with the Louisville and Nashville as Superintendent of the Louisville Division and later of the Henderson and St. Louis Divisions.

He severed his connection with the Louisville & Nashville in September, 1900, to go to the Denver & Rio Grande as general superintendent, which position he held until April, 1902. He was then from June 1 to December 31, 1902, superintendent of the Southern Railway at East St. Louis, Ill., and Princeton, Ind.

From January, 1903, until June, 1907, Mr. Martin was general manager of the Mexican International Railway. He resigned that position to return to the Denver & Rio Grande as assistant general manager. He was appointed general manager September 1, 1913.

In his connection with the Louisville & Nashville and Southern Railways, Mr. Martin was a frequent visitor in Memphis and in taking up his new duties he says, "It is just like coming home."

Cripple Creek Short Line Announces Improved Service

WITH schedules effective Sunday, June 6, 1915, the Colorado Springs and Cripple Creek Railroad announces two trains daily between Colorado Springs and Cripple Creek, leaving and arriving terminal points at follows:

Lv. Colorado Springs 8:15 am	11:50 am
Ar. Cripple Creek....11:20 am	2:55 pm
Lv. Cripple Creek....12:20 pm	4:05 pm
Ar. Colorado Springs 3:05 pm	6:50 pm

The distance from Colorado Springs to Cripple Creek is 50 miles. The ride over this wonderful railroad affords one of the grandest scenic trips in America. It is frequently referred to as "The Trip That Bankrupts the English Language."

San Diego Free Side Trip Must Be Arranged for at Starting Point

FREE side trip tickets Los Angeles to San Diego can not be secured in Los Angeles, and to prevent any misunderstanding our agents should make this point clear to purchasers of Exposition tickets. Arrangements for the free San Diego side trip where permitted by tariff regulations must be made at time of purchasing ticket.

Pike's Peak Auto Highway

MOTORISTS are soon to have the unique experience of climbing Pike's Peak by automobile. Announcement has just been made by the Pike's Peak Auto Highway Company that the highway extending from Cascade, Colo., to the summit of Pike's Peak will be opened for travel on July 15, 1915. The construction of this highway is regarded as a masterpiece of mountain road building. It has a great number of wide turn-outs and view-stations from which most inspiring views are obtained. A line of seven and twelve passenger automobiles will be in service scheduled at convenient hours and about five hours will be required for the round trip.



Lake Chicot and Lake Village, a Rapidly Growing Community of Southeastern Arkansas and a Popular Recreation Resort



Automobile Parade, Transportation Day, May 21, 1915, at the Panama-Pacific International Exposition, San Francisco

A Treatise on Sugar Beet Culture and How Beet Sugar is Made

(Continued from page 5)

juice is drawn into the vessels or pans and the crystals grow, the operator or "sugar boiler" governing the size of the crystals. If small crystals are desired, a large quantity of juice is admitted at the outset; while if large crystals are desired, a small quantity of juice is first admitted, and as it boils to crystals, fresh juice is added to the pan and the crystals built up to the desired size. The water used in the condensers of these vacuum pans and the evaporators goes to the beet sheds and is used in floating in the beets.

The mass of crystals from the vacuum pans with syrup around them and containing about ten per cent of water is let out of the pans into a large open vessel, beneath which are the centrifugal machines. These are suspended brass drums perforated with holes and lined with a fine screen. They are made to revolve about one thousand times a minute, and the crystal mass rises up the side like water in a whirling bucket. Centrifugal force forces the syrup out through the screen holes leaving the white crystals of sugar in a thick layer on the inner surface.

Warm water and then are ready for the dryer. The damp white crystals from the centrifugal machine are conveyed to a horizontal revolving drum about 25 feet long. This drum is furnished with paddles on the inside circumference, the paddles picking the sugar up and dropping it in showers as the drum revolves. Warm dry air is drawn through and takes the moisture out of the sugar, which is now ready to be put into bags.

The syrup that was thrown off from the crystals in the centrifugal machines is taken back to the vacuum pan, evaporated in the same manner as previously described, and from the vacuum pan goes into the crystallizers to carry the process of crystallization as far as it will go. The crystallizers are large horizontal drums each containing about one thousand cubic feet of the crystallized mass, which remains in them from 36 to 72 hours, during which time it is kept in constant motion by a set of slowly revolving paddles to facilitate further crystallization. From the crystallizers this mass goes to the centrifugal machines as before, where the syrup is separated from the crystals. The crystals are remelted and go into the thick juice for white sugar. The syrup still containing a large amount of sugar then goes through the Osmose process, where a portion of the remaining sugar is recovered. The syrup constitutes the largest loss in the process. It contains all of the impurities of the beet juice not recovered by the lime. These impurities prevent more than one and one-half times their weight of sugar from crystallizing, and make what is called molasses.

The Osmose station for recovering part of the sugar from the molasses consists of a number of wooden frames separated from each other by parchment paper. Frames into which molasses enters at the bottom alternate with others into which hot water enters. Molasses and water flow separately from the top of the frames. On the way through salts and some sugar enter the water, while some water enters the molasses. Part of the salts in the molasses which prevent crystallization of the sugar are thus drawn off and the purity of the molasses raised so that it will crystallize. The Osmose molasses is again boiled and placed in the crystallizers. The yellow sugar obtained

The Railroads Are in the Hands of the People

Let us stop for just a moment to see how true it is that the railroads are in the hands of the people.

The Interstate Commerce Commission controls—absolutely—the methods of railway bookkeeping. Uncle Sam looks over the books and sees everything. So does the State Board of Railroad Commissioners. The Government now controls—absolutely—the making of rates. Not a single one of the hundreds of thousands of rates can be advanced without Government sanction, national or state.

Now suppose you had the power to dictate just how the merchant in your town should keep his books and you could go over them at your pleasure. Suppose, in addition, you had the power to mark every article in that merchant's stock at the price

at which you desired him to sell just that price. Would not that merchant be at your mercy? Of course he would. Well, this is exactly the power the Government has over the Railroads.

Now, if you had control over that merchant's bookkeeping and prices, when he came to you in trouble you would be bound to listen to him, for you assumed that responsibility by the very act of taking supervision of his books and the right to fix the prices of what he has to sell. The Railroads of the United States say to the people that they cannot operate on the price which the people have established for the railroads' product—transportation—and the railroads believe that the people of this great country will not evade their responsibility in this matter.

The Railroads' position is the same as that of the merchant. Its goods have been marked down below cost. The store where you buy your railroad transportation is running at a loss. It has reduced its working force, curtailed its operating expenses by the practice of the most rigid economy and yet fails to meet its expenses. That is the situation without exaggeration. No less an authority than the Interstate Commerce Commission, a creature of the people with access to all accounts, its mind always open to the interests of the public, has so declared in no uncertain terms.

There is one way that the doors of business can be kept open and that may be brought about by the people and the railroads putting their heads together and re-marking the transportation goods on a three-cent rate basis under which the railroads of the country and the thousands of people dependent upon them formerly prospered.

therefrom is again remelted and introduced into the thick juice.

After the moisture has been thoroughly removed in the granulator, the sugar drops directly to the sacking room through a chute at the lower end of which the top of the double sugar bag is attached. The sugar flows directly into the sacks, the flow being cut off with each 100 pounds. The bag is then sewed and is now ready for storage or shipment as stated before, not a human hand has touched either beets or product since the beets were topped in

the field. From the sacking room the sewed sugar bags are conveyed to the sugar warehouse, where the bags are stacked about fifteen bags high with a bag stacker.

Each set of apparatus for performing a given process in the manufacture of sugar is termed a "station." In the chemical laboratory of the factory the juices and products from each station are tested hourly to check up the correctness of the work and to determine the losses of sugar in each process in the factory.

Recreation Grounds in Missouri Pacific-Iron Mountain Territory

(Continued from page 4)

in session from August 3 to 15. Before and after the assembly the bungalows and tents may be rented by private parties or the grounds may be secured for other assembly or Chautauqua purposes.

Nearby is located the Methodist Assembly Grounds, somewhat similarly improved, where the Methodist of the Southwest Conference gather for recreation and study each year. The Methodist Assembly for 1915 opens July 13 and closes July 25.

Pertle Springs

One and a half miles south of Warrensburg, Mo., on the Missouri Pacific is Pertle Springs, a splendidly improved recreation resort and Chautauqua Assembly. Many large conventions meet here every year and are well cared for. There is a large three-story hotel, a fine lake, tennis courts and a number of cottages and bungalows—probably nowhere in Missouri is there a more beautiful landscape than that made by the hills and valleys, lake and springs of this natural playground.

Lake Chicot, Arkansas

The residents of Eastern, Central and Southeastern Arkansas have a beautiful outing resort at Lake Chicot in Chicot county. The lake is well stocked with black bass, speckled perch and other good varieties. Rowing and motor-boating afford a popular pastime. The woods nearby abound in deer, wild turkey, squirrel and other game. Lake Village is a rapidly growing community and is the trading point of a very rich farming section.

Mount Nebo, Ark.

Midway between Little Rock and Ft. Smith, Arkansas has another very delightful summer outing place—Mt. Nebo, reached by way of Russellville and Dardanelle. From points along the road splendid views are obtained of the surrounding landscape. Two hundred feet from the top is the "Bench," where a large number of Russellville and Dardanelle people have their cottages.

Space will not permit of even brief mention of a number of other interesting points along the Missouri Pacific-Iron Mountain Lines. Nothing has been said about the almost innumerable resorts of Colorado, as that section is to be treated in a special number of the Bulletin, in July.

If at any time Agents receive inquiries about points about which they are not supplied with late information, a letter addressed to the General Passenger Agent will secure the desired information promptly.

Outing Map of Southeastern Missouri

An interesting County and Township Map, in three colors, showing location of Recreation Points, Camping Sites, Fishing Places, Canoe-floats on the Current, Black, St. Francis, Meramec and Big Rivers and other Outing Resorts in Eastern and Southeastern Missouri and Southwestern Illinois, has been issued by the Missouri Pacific-Iron Mountain.

This map is of particular interest to fishermen, canoeists and outdoor enthusiasts who desire information regarding the recreation possibilities of Southeastern Missouri.

Any agent interested in or having calls for such information may obtain a copy or supply of this map by addressing the General Passenger Agent, St. Louis.



Opinions of the Scenic Limited

"Scenic Limited" is Great Train to Coast Expositions

Kansas City Post, June 4, 1915

The two great expositions on the Pacific Coast have created a world of trans-continental travel this year. For the purpose of giving the best possible service to patrons the Missouri Pacific inaugurated a fine new "all-steel" train from St. Louis to California. This train is one of the best that crosses the continent.

Across Missouri to Kansas City and from Kansas City to Colorado the line of the Missouri Pacific passes through some of the finest farming country in America. For miles and miles the broad fields of hay and grain are a feast for eyes weary with looking at tall buildings and dusty streets of the city. Only the largest and most important towns are favored with a stop by this De Luxe train as it whizzes to the Golden West. Observation cars make it possible for the passenger to view the country with an unobstructed view and when tired of looking one can turn to the library, where all the latest and best magazines are supplied free. One can also enjoy the convenience of fine stationery and writing desks if they wish to send messages to friends or attend to business matters.

When the "Scenic Limited" gets into Colorado it passes through some of the finest scenery in the world. Royal Gorge, Tennessee Pass, Eagle River and Grand River Canons are gorgeous in their impressive beauty and grandeur. Then leaving Colorado one is carried to the Great Salt Lake, in Utah and on through the Sierra Nevada Mountains to California and the Golden Gate. All the way there are no drawbacks to the trip. A train running smoothly over a good roadbed and fast enough to cause one to forget that trips are sometimes tiresome and with a variety of scenery that attracts the attention all the way.

Passengers who use the "Scenic Limited," on the Missouri Pacific, to Denver, Pueblo, Colorado Springs, Salt Lake City and into California find that it is truly as is claimed—"The Mountain Way, The Scenic Way, The Swiftest Way."

St. Louis, April 20, 1915

Mr. Edward Hidden, President,
The Business Men's League.

My Dear Mr. Hidden:

Acknowledging your circular letter of the 6th instant, regarding a visit on the part of the members of the League to the San Francisco Exposition.

I returned from San Francisco on yesterday, coming East via the route of The Scenic Limited, which arrives here over the Missouri Pacific.

It pleases me very much to recommend favorably to the Members of the League, the visiting of both the Expositions in California and certainly, if an opportunity presented itself, I should go both ways on The Scenic Limited, where you will find possibly the finest train in the world, together with good dining cars, good roadbed and magnificent scenery.

As indicated to you in my note from Los Angeles, I think it desirable to make the trip, as planned from here to San Francisco, then to Southern California, returning over the San Pedro, Los Angeles & Salt Lake Route to Salt Lake City and then directly home, on The Scenic Limited. The trip is a fine one, the fair is very interesting and I think every member of the League should see it.

Yours very truly,

(Signed) LEWIS T. TUNE.

Western Union Night Letter

April 29, 1915

Mrs. George Miller Taylor,
New Rochelle, N. Y.

En route to China on Scenic Limited via Missouri Pacific, D. & R. G., and Western Pacific. Have just reached San Francisco after most delightful trip; never had I seen such country and the scenes are past describing. All the inconveniences of travel are overcome on The Scenic Limited and I wish you could all have been with me. Have found others going to the Hotel Stuart.
IDA MILLER TAYLOR.

Members of the family of Mr. Amos Wilson, Cashier, First National Bank, Leavenworth, Kansas, recently made the trip to Salt Lake City on The Scenic Limited from Kansas City, and in writing to Mr. Wilson about the trip have many nice things to say for Scenic

News and Notes from the Expositions

SINCE the opening of the Panama-Pacific International Exposition at San Francisco on February 20th, more than four million persons have passed through the turnstiles. Only one or two days has the attendance, as registered by the counting machines,

Liberty Bell from Philadelphia in July. It is expected to have this sacred relic of American freedom in San Francisco in time to be the inspiration of a celebration on July 4th, commensurate with the occasion. A fitting background for the appearance of Liberty Bell will be the fleet of American warships, which will be stationed in the harbor early in the summer. After a stay at the San Francisco Exposition, it is proposed to take the Liberty Bell to the Panama-California Exposition at San Diego.

Eight hundred and twelve congresses, conventions and conferences will meet in San Francisco during the year, the majority on the Exposition Grounds. The San Francisco Civic Auditorium will accommodate the larger of these, others being held in the Festival Hall on the Exposition Grounds and at the Oakland Auditorium. It is the conservative estimation of the Division of Congresses and Conventions of the Exposition that there will be one million visitors in San Francisco during the summer whose presence will be directly traceable to the hundreds of conventions scheduled to meet in the Exposition City. These visitors will be additional to the regular tourist traffic.

In order to assist visitors, the management of the Exposition is distributing an excellent hotel guide. In this guide are listed the names of hotels, rooming houses and apartment houses that have agreed to maintain fair prices during the period of the Exposition. These hotels are listed with the Official Exposition Hotel Bureau under an agreement not to increase rates. All prospective visitors to San Francisco for the Expositions who desire the service of the Bureau may receive a copy of this guide free by addressing the Bureau, Flannery Building, San Francisco. Hotel or rooming house accommodations may also be reserved through the Bureau.

or the grandest scenic trips in America

The Elks' Convention meets in Los Angeles, July 12th to 17th. An unusually large attendance is expected. Following the convention at Los Angeles, the Elks will visit the Expositions at San Diego and San Francisco.

On July 17th, immediately following the Elks' Convention, Utah Day will be celebrated at the San Diego Exposition. It is expected that Gov. Spry with entire State Commission will participate in the ceremony.

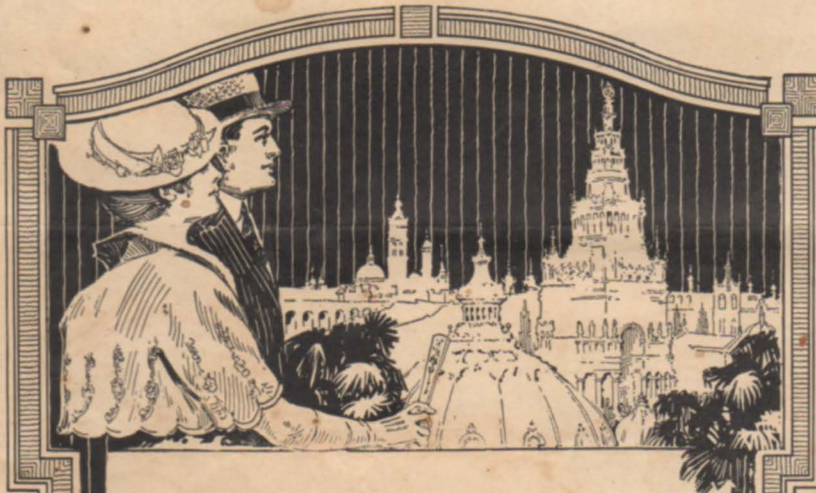
The San Diego Exposition has entered the sixth month with an extraordinary record for attendance and practically every day shows a steady increase. June starts with a heavy business from the Middle West and from now on through the vacation season the "Exposition Beautiful" at San Diego will be a veritable throng of humanity

No Side Trips Necessary for Scenic Limited Travelers

NO EXPENSIVE side trips are necessary to see the scenery of the great West when travelers use The Scenic Limited. More magnificent scenery can be enjoyed from the car windows of this handsomely equipped, all-steel, through train than from any other train in this country. One who has made the trip asserts that fully 90 per cent of the best scenery of the West can be seen from this train on its way from the Mississippi to the Golden Gate.

System Lines' Exhibit at San Francisco Exposition Wins Gold Medal

"THE Globe" exhibit installed by the Missouri Pacific, Denver & Rio Grande and Western Pacific, in the Transportation Building at the Panama-Pacific International Exposition, San Francisco, has attracted unusual attention from Exposition visitors and has been the subject of special mention in many newspapers all over the country and in such leading magazines as "Travel" and "Scientific American." We are just in receipt of a telegram announcing the fact that the exhibit has been awarded a gold medal.



THE
Scenic Limited

All Steel—Handsomely Equipped
Daily Service

via

Missouri Pacific

Denver & Rio Grande—Western Pacific

with through Drawing Room Sleeping
Car daily between St. Louis, Kansas
City, Colorado Springs and Denver

ONLY train from St. Louis
Through to California.

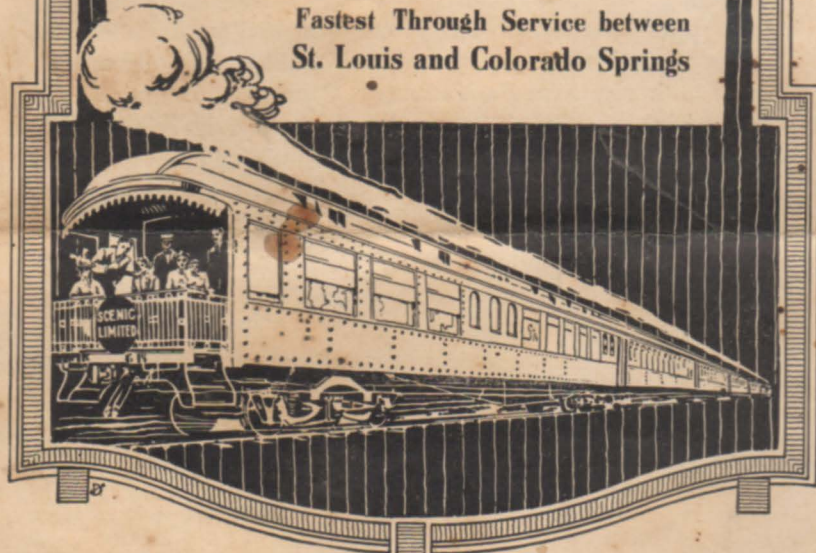
ONLY train from St. Louis
Through the Royal Gorge.

ONLY train from St. Louis
Through Salt Lake City.

ONLY train from St. Louis
Through Feather River
Canon.

The FIRST Through Train be-
tween St. Louis and San Fran-
cisco.

Fastest Through Service between
St. Louis and Colorado Springs



Limited service. Portions of the letter follow: "Never traveled on train that had more pleasant and accommodating trainmen * * * The Mo. Pac. has given us some mighty fine scenery and service * * * This is as satisfactory a road as I have ever traveled over. * * * This is a fine train, the smoothest riding I ever did.

fallen below 40,000 per day. This extraordinary attendance, preceding the great vacation travel season, gives definite promise of the continued and spectacular success of the Exposition.

Among the advance events of international interest scheduled for the Exposition is the anticipation of the